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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,979	05/01/2001	W. Brian Darling	31428	3905

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EXAMINER

NASH, BRIAN D

ART UNIT

PAPER NUMBER

3721

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/846,979

Applicant(s)

DARLING ET AL.

Examiner

Brian D Nash

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 31-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 31-33 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment received 23 April 2003. Examiner acknowledges changes to claims 1, 12, and the addition of new claims 22-33.

Election/Restrictions

2. Newly submitted claims 31-33 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 31-33 are directed toward a method of using the apparatus as originally presented in claims 1-21.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 31-33 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 4, 6, 11-12, 14, 16, 21-23, 26-27, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,690,387 to Dixon. Dixon discloses the same invention including a rotation drive mechanism having a rotation motor (21) with first and second ports and a drive linkage (67) coupled thereto (see Fig. 1); first and second media lines (66) connected to

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respective ports of the rotation motor; a float system (see Fig. 2) having a valve (63) interposed between the first and second media lines (66) and a control mechanism (64) that switches the valve between a closed position substantially isolating one media line from another and an open position wherein the first and second media lines (66) are in communication with each other (see column 6, lines 24-42); equalization of pressure between ports (66) permitting the rotating body (16) to rotate toward a side load (see column 8, lines 15-27); also included are a blocking valve (83); and a flow control device (79,82 – see column 7, lines 34-47) positioned in-line with the valve (63) which passively limits the flow rate of the pressurized fluid.

Regarding the amendments to claims 1 and 12 wherein the control mechanism further includes a manual actuation mechanism the examiner again refers to Dixon (see Fig. 3, greater detail of Fig. 2). Dixon discloses a control lever (119), which is actuated by an operator, for control valve (63) (see column 10, lines 39-42).

Regarding new claims 26 and 30, the examiner refers to Dixon (see column 11, lines 1-19 and column 13, line 40 to column 14, line 10) wherein Dixon discloses substantially automatic control of a side loading system when a predetermined pressure is exceeded as well as manual operation of a float system.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 7-10, 15, 17-20, 24-25, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dixon in view of US 4,093,091 to Gregg et al. As discussed above in paragraph 4 of this office action Dixon discloses the invention substantially as claimed but does not include float system having an electronic control mechanism, a tilt switch, an indicator coupled to the control mechanism, or an electrical relay between the control mechanism and the valve. However, Gregg teaches the use of an overload sensing means having an electronic transducer and logic system (see Gregg, column 2, lines 10-15); a strain gauge (72) and a switch (80) in association with valve (56) for detection of and tilt control; and indicator signals (A,B,C,D) – all for the purpose of providing the operator with notification prior to an overload situation. In view of Gregg, it would have been obvious to one having ordinary skill in the art to have provided Dixon's mechanical float control system with an electronic system including switches and indicators for control and notification of overloaded side load conditions for the purpose of providing a more reliable system because such mechanical elements alone may stick (such as valves) and render such systems inoperable (see Gregg, column 1, lines 33-41) as well as providing the operator with such notification means.

Regarding claims 9 and 19, examiners construes indicators, as disclosed by Gregg, to inherently incorporate either an audible or visible notification. While Gregg does not specifically disclose an audible or visual alarm, it is well known in the art that such indicators include such a notification mechanism (e.g. visual light on an operator console).

Regarding claims 24 and 28, Dixon discloses a flow control device (79,82 – see column 7, lines 34-47) positioned in-line with the valve (63) which passively limits the flow rate of the pressurized fluid. It would have been an obvious matter of design choice to regulate the flow

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rate of the pressurized fluid via an orifice having dimensions that restrict and limit since the valve shuttle and land (79,82 respectively) serve the same function and produce the same results.

7. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dixon.

As discussed above in paragraph 4 of this office action Dixon discloses the invention substantially as claimed but does not disclose the use of a pair of poppet-type solenoid valves interposed between the two ports of the rotary motor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a poppet-type solenoid valve since the examiner takes Official Notice of the equivalence of a shuttle valve (63,64) and poppet-type solenoid valve for their use in the hydraulic system art and the selection of any of these known equivalents to a poppet-type solenoid valve would be within the level of ordinary skill in the art.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Raunisto, Finley et al., and Updegrave are cited to show related methods.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Nash whose telephone number is (703) 305-4959. The examiner can normally be reached on Monday – Thursday from 8 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached at (703) 308-2187.

The fax numbers for this Group are:

Before Final	703-872-9302
After Final	703-872-9303
Customer Service	703-872-9301

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.


Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700

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Brian D. Nash

22 May 2003